DOCUMENT RESUME

ED 120 629 CG 010 460

AUTHOR Norem-Hebeisen, Ardyth A.
TITLE Multi-Dimensional Construct of Self-Esteem: Tools for Developmental Counseling.
SPONS AGENCY Minnesota Univ., Minneapolis. Office of Alcohol and Other Drug Abuse Programming.; Minnesota Univ., Minneapolis. University Computer Services.
PUB DATE 1 Sep 75
NOTE 18p.; Paper presented at the Annual Meeting of the American Psychological Association (83rd, Chicago, Illinois, August 30-September 2, 1975). Not available in hard copy due to marginal legibility of original document

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS Affective Tests; Factor Analysis; Individual Development; *Measurement Instruments; Personality Tests; *Self Concept Tests; Self Evaluation; *Test Construction; *Test Validity

ABSTRACT

A multi-dimensional construct of self-esteem has been proposed and subjected to initial testing through design of a self-report instrument. Item clusters derived from Rao's canonical and principal axis factor analyses are consistent with the hypothesized construct and have substantial internal reliability. Factor analysis of item clusters produced four broad dimensions of considerable consistency with the proposed structure: Basic Acceptance, Conditional Acceptance, Real-Ideal Congruence, and Self Rating. Specific item clusters within these dimensions include Showing Feeling, Being Known, Social Sources, Performance sources, Real-Ideal, and Self-Rating. Increasing levels of basic acceptance, freedom from conditionality, congruence between real and ideal self, and a realistically derived self-evaluation is considered movement toward healthier functioning. Initial construct validity efforts show statistically significant ourcomes in predicted directions in responses of dysfunctional youth. The instrument offers a means of conceptualize and assess self-valuing processes, a significant outcomes in predicted directions in responses of dysfunctional youth.

**********
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
**********

ED120629

# Multi-dimensional Construct of Self-Esteem: Tools for Developmental Counseling

by

Ardyth A. Norem-Hebeisen

Office of Alcohol and Other Drug Abuse Programming

University of Minnesota

Presented at 1975 Annual Convention of the American Psychological Association

September 1, 1975

CG 010 460

Research reported in this paper was funded through the Office of Alcohol and Other Drug Abuse Programming and University Computer Services of the University of Minnesota. Consultation for data analysis provided by Dr. Andrew Ahlgran is gratefully acknowledged.

BEST COPY AVAILABLE

HARD COPY NOT AVAILABLE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

## Abstract

A multi-dimensional construct of self-esteem has been proposed and subjected to initial testing through design of a self-report instrument. Item clusters derived from Rao's canonical and principal axis factor analyses are consistent with the hypothesized construct and have substantial internal reliability. Factor analysis of item clusters produced four broad dimensions of considerable consistency with the proposed structure: Basic Acceptance, Conditional Acceptance, Real-Ideal Congruence, and Self Rating. Specific item clusters within these dimensions include Showing Feeling, Being Known, Social Sources, Performance Sources, Real-Ideal, and Self-Rating. Increasing levels of basic acceptance, freedom from conditionality, congruence between real and ideal self, and a realistically derived self-evaluation is considered movement toward healthier functioning. Initial construct validity efforts show statistically significant outcomes in predicted directions in responses of dysfunctional youth. The instrument offers a means to conceptualize and assess self-valuing processes, a common focus of affective education and counseling.

## Self-Esteem as a Developmental Focus for Counseling

The developing individual periodically confronts issues of personal autonomy, accountability, competence, identity, belonging and intimacy. Self-esteem is an underlying theme behind each of these issues and may be thought of as a mediating variable which influences the way an individual deals with each of them. A person with high esteem would be expected to deal more adequately with each of the issues mentioned.

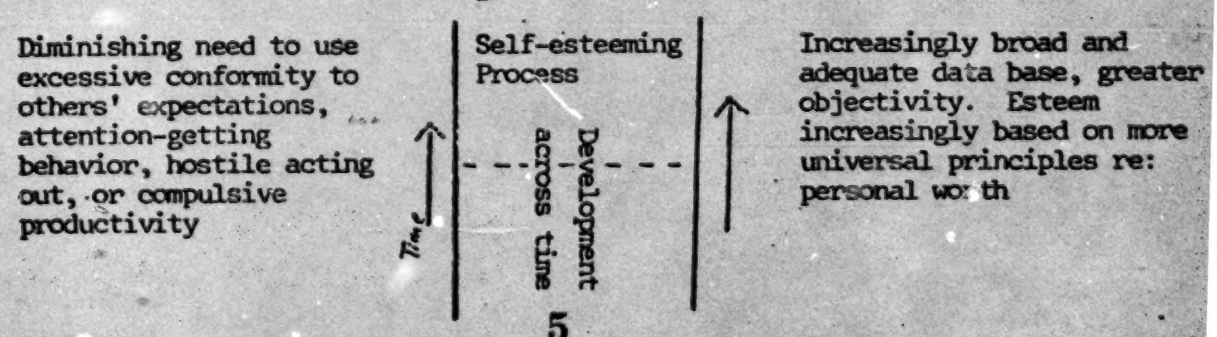
A developmental view of self-esteem implies varying degrees of complexity, comprehensiveness, integration, and adequacy resident in the processes people use to derive self-esteem. These processes, if truly developmental in nature, would show increasing adequacy with increasing maturity. Identification of a differentiated structure of self-esteem may provide some conceptual categories needed for the study of the development and maturation of self-esteeming processes.

This paper outlines the initial validation study of a multi-dimensional construct of self-esteem. The construct delineates among several processes through which self-esteem is derived. It provides a theoretical construct useful in the study of the developing sense of personal worth. It is also useful as a tool for focusing clients' attention to the manner in which they process present experiences to an outcome of painful or personally enhancing feelings of worth.

## Parameters of the Proposed Model

For purposes of this discussion, self-esteem is defined as a process of arriving at a disposition toward self regarding one's worth or value. The multidimensional construct being proposed is an evolving construct, not yet a complete formalized theory. Although it is being presented at this conference in the context of developmental counseling, it does not propose an invariant hierarchical sequence of development, nor the process of patterning or transformations of organizational levels so characteristic of developmental theories. This construct proposes several different internal processes for making meaning which are hypothesized to function concurrently to one another. It is hypothesized that early formation of the processes occurs sequentially. It is further assumed that affective and cognitive dispositions toward the self show qualitative changes across time. As illustrated in Figure 1, affective and cognitive dispositions toward self are predicted to become more stable, more consolidated, and more congruent with "objective" reality. Judgements of one's worth are made on increasingly universally based principles and on a broader data base. Concommitant with increased development will be a decreased need to support self worth through attention-getting behavior, excessive conformity to the expectations of others, hostilly acting out behavior, or compulsive productivity.

Figure 1


Diminishing need to use excessive conformity to others' expectations, attention-getting behavior, hostile acting out, or compulsive productivity
Self-esteeming Process
Development across time
Increasingly broad and adequate data base, greater objectivity. Esteem increasingly based on more universal principles re: personal worth

Much of the research I will report today will focus on analysis of the related, concurrently functioning dimensions of the self-esteeming process represented by the dotted horizontal line on Figure 1.

The construct proposed differentiates varying affective and cognitive processes used to derive self-esteem. The processes proposed are Basic Acceptance, Conditional Acceptance, Real-Ideal Congruence, and Self-Evaluation. Efforts to operationalize each of the processes through item writing resulted in sub-components within some of the processes. These are outlined in Figure 2.

Figure 2

Predicted Hypothetical Structure of Self-Esteem

| Basic Acceptance | Conditional Acceptance | Real-Ideal Congruence | Self Evaluation |
|---|---|---|---|
| Well Being | Performance Sources | Real-Ideal Congruence | Self-Rating (Evaluation) |
| Autonomy | | | |
| Ease with Feelings | Social Sources | | |
| Ease with Relationships | | | |
| Ease of Disclosure | | | |

The first dimension identified is that of Basic Acceptance, a basic comfort and ease experienced in expressing and being self. It is a non-logical, non-verbal sense of one's acceptability. It reflects sensitivity to the intrinsic acceptability of self. Components of Basic Acceptance were hypothesized to be a general sense of well being, a sense of autonomy, freedom of feelings, freedom in

relationships, and ease of disclosure. Reference to the Basic Acceptance aspect of self worth has been made by Maslow (1973), Rogers (1959, 1961), Reisman (1950), Shostrom (1968), and Brookover (1975).

The second dimension of self-esteem is Conditional Acceptance. Through this process the limits of self-acceptance are established by an implied, "If_____, then _____," logic. Judgements of acceptance are based on achievements of criteria external to the individual. It is not based on how he or she experiences him or herself, but on fulfillment of external standards and expectations. Conditional Acceptance was hypothesized to have two basic components, one based on a sense of acceptance derived through social conditions, and another based on achievement of tasks and competencies. Both social sources and performance sources of acceptance refer to conditions external to the intrinsic worth of the individual. Rogers (1959), Brookover (1975), Hamachek (1975), and Shostrom (1968) describe aspects of self-esteem related to conditionality of acceptance.

The third proposed dimension of self-esteem is Real-Ideal Congruence, a measure of the correspondence between what one thinks he is and what one thinks he should be (his preferred self). This aspect of self-esteem has been referred to by Hamachek (1971), Rogers and Dymond (1965), McCandles (1967), and James (1890).

Self-evaluation, the fourth dimension, is a self estimate of how the individual compares with other persons. Rosenberg (1965), Hamachek (1975), Brookover, Patterson and Thomas (1965) have described the self evaluative function in their writings.

The value bias within these dimensions is that increasing

levels of basic acceptance, freedom from conditionality, congruence between real and ideal self, and a realistically derived self-evaluation is movement toward healthier functioning.

Initial Validation Study of the Multi-Dimensional Construct

An instrument was designed to test whether the dimensions proposed could be demonstrated empirically. Several assumptions were made to guide the selection of items for an initial item pool. It was assumed that self-esteem is a relatively generalized state which fluctuates minimally from day to day. It was also assumed that individuals can make cross-situational generalizations about the way they usually feel, think, and act, and that their self-report of this generalization is a viable method for measuring self-esteem.

A large pool of items was compiled, sorted, rewritten, critiqued, rewritten again, until the items and the item format accomodated the solicited comments and recommendations provided by teachers, high school students, graduate students, and specialists in the field of measurement. The result was a 149 item instrument with 26 descriptive adjective items presented in formats which the "wish" aspect of Real-Ideal Congruence, the "should" aspect of Real-Ideal Congruence, and Self-Evaluation, and 71 items primarily focused on Basic and Conditional Self Acceptance.

The completed instrument, now identified as Self Assessment Scales was administered to a total of 396 9th, 11th, and 12th graders in a white, middle class midwestern suburban high school. Other subgroups of adolescents tested included 23 high school seniors

participating in an independent study program, 22 drug abusers in a residential treatment center, 22 youths who had run away from home, and 17 emotionally disturbed youth from a residential psychiatric treatment program for emotionally disturbed and learning disabled adolescents. All groups were of high school age except the drug abusers who had a mean age of 21. The high school population was used for the initial testing of the multi-dimensional structure of self-esteem. The special sub-groups were selected for further validation studies.

Because of the large number of items and the limited capacity of the factor analysis program in the Statistical Package for the Social Sciences, the item responses were analyzed in sub groupings. Data analysis included principle axis or common factor analysis with subsequent varimax rotation to identify initial clusters among the items developed to represent the basic and conditional dimensions (items 79-149). Criteria for selection of viable item clusters from the analysis included (1) factors selected must have eigenvalues of $\geq 1.0$; (2) there must be four or more items per factor with factor loadings of $\geq .4$; (3) high loading items on a factor must be logically consistent with the other high loading items on that factor to be included. Item clusters made up of items in this manner were then correlated with all other items to identify those which correlated substantially with the cluster. These highly correlating items were added to the cluster if their addition increased the index of internal consistency. This procedure was followed until the Cronback Alpha indices of internal reliability were a minimum of .70 or higher. .70 was judged to be an adequate

standard, given the relative difficulty of identifying discrete functions in the area of personality measurement generally. Scale clusters derived from items 79-149 and their internal reliabilities are Well Being, $\alpha$= .87; Ease of Disclosure, $\alpha$=.81; Showing Feelings, $\alpha$= .88; Performance Sources, $\alpha$ = .75; Social Sources, $\alpha$ = .88 (Table 1).

Recently a Rao's canonical factor analysis was run on the same items, revealing practically identical assignments of the selected items to factors.

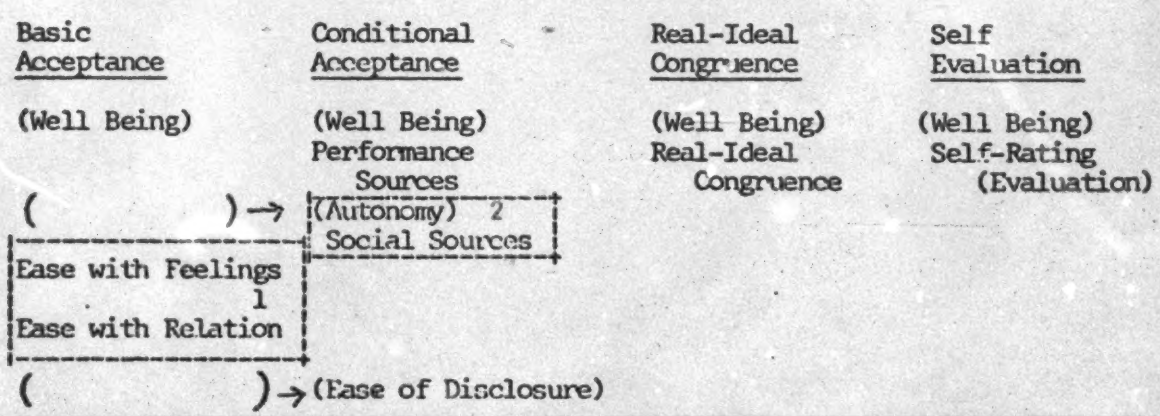
The initial objective of the Real-Ideal Congruence and Self-Evaluation items was to identify two scales with substantial internal reliability. Internal reliability for these dimensions when all the proposed items were included was .83 for Real-Ideal Congruence, and .77 for Self-Evaluation. In an effort to identify if the congruence and evaluation items had distinctive subcategories, these items were also submitted to factor analysis. Varimax rotation of principle axis factors produced 6 factors for the "wish" dimension of congruence, 5 factors for the "should" items of congruence, and 7 factors for Self-Evaluation. Since there was some logical consistency among high loading items on each factor, it is plausible that Real-Ideal congruence and Self-Evaluation are each multi-faceted dimensions. As the purpose of this study was to identify congruence and evaluation as unique dimensions of self-esteem, and clarification of the potential components would constitute another line of study, the decision was made to limit item clusters to the two dimensions identified.

Factor analysis is one means of identifying orthogonal components of a multi-dimensional construct. However, as only high loading

items on each factor were selected for the item clusters, the clusters would not be expected to be orthogonal or independent of one another. The relative independence of the clusters also needs to be identified through inter-cluster correlations. The correlations among the clusters range from .54 to .02 (Table 2). Common variance among the clusters ranges from .25 to .04, suggesting considerable interrelationship among some pairs, and marked independence among others. Since the initial hypothesis had proposed a broader structure, the item clusters were factored to see if the broader dimensions proposed were to emerge. Two analyses were run: Rao's canonical and varimax rotations on Principal Axis factor analysis. The factor structures from these two analyses were essentially identical except for a variation on the distribution of the Well Being cluster (Table 3). This analysis produced a four component structure resembling the predicted structure, but with some reassignment of the components as proposed in Figure 2. The Autonomy and Ease of Disclosure components were assigned to the conditionality dimension rather than the Basic Acceptance dimension. Well Being dispersed across the four dimensions. This outcome is summarized in Figure 3.

Figure 3

Empirical Structure of Self-Esteem Based on Self Assessment Scales




1. combined to make Showing Feelings
2. combined to make Social Sources

Multi-variate contrasts of the school population with the criterion populations of drug abusing adolescents showed significance $< .0001$, with five of seven cluster contrasts significant ($p < .001$). Thus, the subjects' response on this instrument was consistent with the hypothesis that self-esteem is correlated with the functional quality of an individual's life.

Self Assessment Scales in Counseling and Developmental Instruction

Since the initial design of the four dimensional model and the instrument to test it, a modified 71 item scale had been developed which is written on a fifth grade reading level to facilitate reading among seventh grade students with reading difficulties. A computer printed profile summarizes the data according to item clusters and presents outcome in graph form representing the mean responses to each item cluster. An interpretive manual is available to the individual to provide information on the responses given in each cluster category, and simple exercises are suggested for further exploration and growth in each of the components of self-esteem.

## Conclusions

A multi-dimensional construct of self-esteem has been proposed and subjected to initial testing through design of a self-report instrument. Data analysis indicates that item clusters emerging from both canonical and principal axis factor analysis are consistent with cluster categories initially hypothesized, and have substantial internal reliability. Factor analysis of item clusters produced four broad dimensions of considerable consistency with the proposed structure. Initial construct validity efforts show statistically significant outcomes in predicted directions in measurement of dysfunctional

youth. A subsequent study indicated that the signs of pathology represented by the Minnesota Multiphasic Personality Inventory are inversely correlated with these components of self-esteem. These outcomes are suggestive, but are far from conclusive support for the construct. Tests of specific developmental trends as measured by this instrument have yet to be tested. An initial study limited to persons in the upper range on the Defining Issues Test (moral development) indicated no systematic relationships. The construct presently represents multidimensional processes functioning concurrently. The hypotheses of qualitative changes in the functioning of those processes over time have yet to be delineated and validated, and a clear relationship between the multiple facets of self-esteem and other criteria such as behavior have yet to be established.

A recent article in Psychology Today is titled, "Adult Life Stages: Growth Toward Self Tolerance." If indeed, negotiation of self-esteem is a task extending late into life as suggested by this article, contrasts of Self Assessment Scales responses across a spectrum of years may give some important cues for the understanding of developmental aspects of self-esteem. It is highly probable that increasing independence from conditional bases for self acceptance does not develop until later in life for many persons. For many others it may never be achieved. Correlation of different dimensions of self-esteem and the negotiation of specific developmental tasks is a provocative area for study.

This instrument and the construct it represents offer one means through which to carry out research significant to the study of developmental aspects of self-esteem, and offers a crude tool for use in counseling and evaluation of counseling efforts which are directed toward self-esteem.

References

Brookover, W. R. and Erickson, Edsel L. Sociology of education. Homewood, Ill.: The Dorsey Press, 1975.

Brookover, W. B., Patterson, A., and Thomas, S. Self concept of ability and school achievement II: Improving academic achievement through students' self concept enhancement. U.S. Office of Education, Cooperative Research Project No. 1636. East Lansing: Office of Research and Publications, Michigan State University, 1965.

Hamachek, Don E. Behavior dynamics in teaching, learning, and growth. Boston: Allyn & Bacon, 1975.

Hamachek, Don E. Encounters with the self. New York: Holt, Rinehart, and Winston, 1971.

James, W. The principles of psychology, vol. 1. New York: Holt, Rinehart and Winston, 1890.

Maslow, A. H. Some basic propositions of a growth and self-actualization psychology. In David W. Johnson. Contemporary social psychology. New York: Lippencott, 1973.

McCandless, B. R. Children: behavior and development (2nd ed.). New York: Holt, Rinehart and Winston, Inc., 1967.

Reisman, D., Glazer, N., and Denny, R. The lonely crowd. New York: Doubleday, 1950.

Rogers, C. A theory of therapy, personality, and interpersonal relationship as developed in the client-centered framework. In Sigmund Koch (ed.) Psychology: a study of science. New York: McGraw-Hill, 1959.

Rogers, C. On becoming a person. Boston: Houghton-Mifflin, 1961.

Rogers, C. and Dymond, Rosalind F. Psychotherapy and personality change. Chicago: University of Chicago Press, 1954.

Rosenberg, M. Society and the adolescent self-image. Princeton, N.J.: Princeton University Press, 1965.

Shostrom, Everett L. EITS Personal Orientation Inventory: an inventory for the measurement of self-actualization. San Diego: Educational and Industrial Testing Service, 1968.

TABLE 1

INTERNAL RELIABILITIES ON ITEM CLUSTERS

| Self Assessment Scales Item Clusters | Test-Retest N=60 9th, 11th Grades | Chronbach Alpha 9th, 11th, 12th Grades N=396 (Original) | 12th Grade N=162 (Revised) | 7th Grade IV=73 (Revised) |
|---|---|---|---|---|
| Showing Feeling | .69 | .88 | .82 | .80 |
| Being Known | .78 | .81 | .72 | .80 |
| Performance Sources of Acceptance | .78 | .75 | .69 | .60 |
| Social Sources of Acceptance | .78 | .88 | .87 | .82 |
| Well Being | .78 | .87 | .89 | .80 |
| Self-Rating (Evaluation) | | .77 | .80 | .89 |
| Real-Ideal Congruence | | .82 | .81 | .88 |

TABLE 2

INTER-SCALE CORRELATION MATRIX BASED ON NORM GROUP RESPONSES

| | Well Being | Being Known | Freedom of Feelings | Social Sources | Performance Sources | Self Rating (Evaluation) |
|---|---|---|---|---|---|---|
| Well Being | | | | | | |
| Being Known | .54 | | | | | |
| Showing Feeling | .27 | .29 | | | | |
| Social Sources | .47 | .50 | .03 | | | |
| Performance Sources | .31 | .33 | .03 | .52 | | |
| Self Rating (Evaluation) | .45 | .27 | .19 | .36 | .21 | |
| Real-Ideal Congruence | .37 | .35 | .02 | .39 | .23 | .23 |

TABLE 3

PRINCIPAL AXIS FACTOR
VARIMAX ROTATED FACTOR MATRIX
AFTER ROTATION WITH KAISER NORMALIZATION
(No Interations)

| | | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
|---|---|---|---|---|---|
| BROAD CLUSTERS: | SUB-CLUSTERS | | | | |
| | WELL BEING | .21 | .15 | .25 | .19 |
| SHOWING FEELING: | FEELINGS | .04 | -.01 | -.02 | .64 |
| | RELATIONSHIPS | -.10 | -.02 | -.01 | .68 |
| | BEING KNOWN | .33 | .13 | -.02 | .25 |
| | PERFORMANCE SOURCE | .49 | -.07 | -.01 | -.09 |
| SOCIAL SOURCES: | SOCIAL CONDITIONALITY | .55 | .02 | .01 | -.12 |
| | AUTONOMY | .53 | -.02 | -.07 | .05 |
| REAL-IDEAL CONGRUENCE: | PERFORMANCE CONGRUENCE | -.04 | .69 | -.04 | -.01 |
| | SOCIAL CONGRUENCE | -.03 | .69 | -.01 | -.05 |
| SELF RATING (EVALUATION): | PERFORMANCE EVALUATION | -.00 | -.05 | .68 | .02 |
| | SOCIAL EVALUATION | -.01 | .04 | .68 | -.04 |

17

TABLE 4

RAO'S CANONICAL FACTOR
VARIMAX ROTATED FACTOR MATRIX
AFTER ROTATION WITH KAISER NORMALIZATION

| BROAD CLUSTERS: | SUB-CLUSTERS | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
|---|---|---|---|---|---|
| | WELL BEING | .19 | .14 | .36 | .20 |
| SHOWING FEELING: | FEELINGS | .03 | -.03 | -.03 | .64 |
| | RELATIONSHIPS | -.10 | -.03 | -.01 | .66 |
| | BEING KNOWN | .33 | .13 | -.01 | .28 |
| | PERFORMANCE SOURCES | .47 | -.09 | .02 | -.10 |
| SOCIAL SOURCES: | SOCIAL CONDITIONALITY | .57 | .01 | .02 | -.13 |
| | AUTONOMY | .54 | -.04 | -.09 | .06 |
| REAL-IDEAL CONGRUENCE: | PERFORMANCE CONGRUENCE | -.01 | .69 | -.04 | -.00 |
| | SOCIAL CONGRUENCE | -.01 | .69 | .01 | -.04 |
| SELF RATING (EVALUATION): | PERFORMANCE EVALUATION | -.02 | -.06 | .64 | .01 |
| | SOCIAL EVALUATION | -.02 | .01 | .67 | -.06 |